Solid Waste Management

What is solid waste?
-all wastes from human and animal activities that are normally s_________ or s_________-
s__________ and are d______________________ (includes municipal, industrial, and hazardous wastes).

What is solid waste management?
-activities involved with the reduction of g__________, c__________, s__________,
t__________, p__________, and d__________ of solid wastes.
- solid waste management concerns public h__________, e______________,
e______________, conservation, aesthetics, and other environmental considerations.

What is integrated solid waste management? Activities designed to meet the hierarchy of MSW management objectives:

Quantities of solid waste produced:
total production is approximately = _______________ million tons
average solid waste generated per person = _______________ lbs/day
total production = _______________ tons/day
density = _______________ lbs/yd³
if placed in 3 foot layer, it would cover _______________ sq. yds. ___________ sq. miles
if placed in 1 cu. ft. stacks, it would rise _______________ miles high

Other facts:

More than ____________ communities in North America now charge residents for the amount of solid waste they set at the curb - as opposed to a flat-rate or tax-funded system.
Every day _______________ light bulbs and _____ tudes of toothpaste are discarded
Curbside recycling service is provided to at least 108 million people or 41% of U.S. households.
Every day ____ tons of aquarium gravel are purchased.
More than _____ million tons of steel were recycled from cars in 1994, about one fifth of all the steel recycled.
More than _____% of oil filters sold in the U.S. are being recycled. Used oil filters were first recycled at a steel mill in Southern California just over four years ago.
Prior to 1990, there were only _____ composting facilities operating in Canada. Today there are over 158 facilities operating with over twenty more in the planning stages.
California has mandated that all cities must compost yard trimmings to divert solid waste from landfills. At the '96 summer Olympics an estimated ____________ tons of solid waste and recyclables was generated.
Americans spend over _______________ annually on batteries.
174.5 million (69%) of the 253 million tires that became scrap in 1995 were recovered, an increase of 26% from 1994. As recently as 1990, market demand for scrap tires was a mere 11 percent of the total number generated annually.
Led by new facilities to produce recovered paper and paperboard, a 2.5% annual expansion in total U.S. papermaking capacity is forecasted, according to the American Forest and Paper Association.
The s________ c________________ is the most recycled package in Florida.
Each year in the U.S., _______________ million railroad ties need to be replaced.
After a car is shredded, the fabric, plastic, and rubber ends up in a sanitary landfill.
In 1994, an estimated _______ million tires were marketed as tire derived fuel (TDF) burned by power plants, cement kilns, paper mills, and dedicated tire to energy facilities.
______ billion aluminum cans were returned in 1994, w/ recycling rate up to a record 65.4%.
Some 2.5 to 3 billion used tires are stored in the U.S. and 200-300 million more are added each year.
A survey of recycling rates internationally found that Finland leads with 35% diversion, followed by Germany at 33% and Austria at 28%. The U.S. is fourth with a 22% recycling rate. Japan logged the lowest rate at 3.9%.
China generates ___________ million tons of waste per year, of which it recycles very little.
The American Forest and Paper Association says recycled materials constitute _____% of the nations newsprint.
It costs more to advertise and sell a box of brand-name cereal than to manufacture it.
Twenty-one states have banned or plan to ban appliances from landfills.
Recycling is a significant industry in NC, supporting close to ____________ jobs or 0.27% of the state's total employment.
BMW is paying good money for old BMW hulks and hopes to increase the percentage of recycled car weight from the present 75% to over 90%.

From Environmental Engineering News, John M. Bell Editor, Purdue University